

Success Stories FY04/05

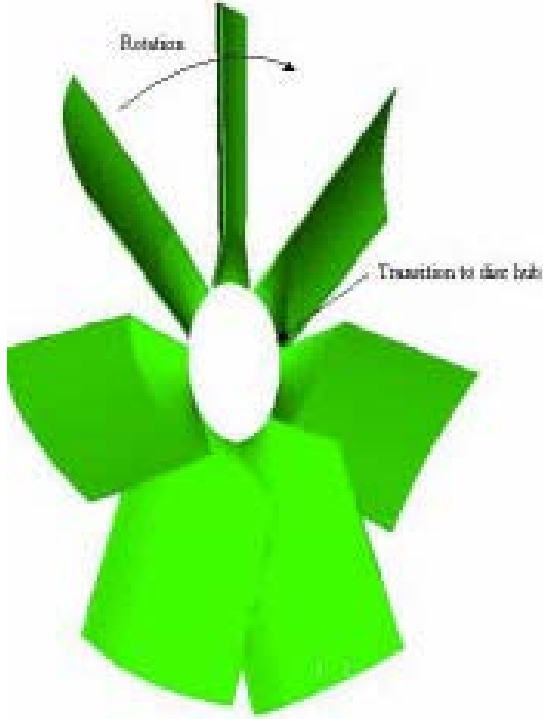
Several HVSO programs are ready for commercialization

Jules Routbort, Argonne National Laboratory



Off-Road Thermal Management – Caterpillar

- Cooling Fan for Off-highway
 - Demonstrated 5% increased flow, 10% increased efficiency
 - Applicable to on-road heavy vehicles



Large high–performance
axial fan



Plasmatron – MIT

■ Plasma Fuel Reformer

- Generates hydrogen for emission reduction in SI engine
- Licensed by Arvin Meritor
- “Breakthrough ArvinMeritor Technology Promises Revolutionary Approach to Extensive Exhaust Emissions Regulation Changes”, from ArvinMeritor literature
- Available as commercial product in 2010

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.



Plasmatron head



More Electric Truck – Caterpillar

■ More Electric Truck

- Electrification (fewer belts/pulleys) improved FE by 2%
- On-board, variable speed APU and connection to “shore power” increased FE by another 6%, reduce overnight idling
- Field tests underway
- Commercialization depends on market

